

Notice of Allowability

Application No.

10/786,820

Examiner

Joseph S. Del Sole

Applicant(s)

KOUMO ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/1/06.
2. ☒ The allowed claim(s) is/are 2-4.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. T. David Bonzer on June 8, 2006.

The application has been amended as follows:

in the claims, replace claim 4 with the following:

4. (Currently Amended) A control system for controlling a continuous rubber molding apparatus continuously extruding a rubber ribbon to be used for building a tire, the control system comprising:

a first continuous rubber-extruding machine and a second continuous rubber-extruding machine,

said first continuous rubber-extruding machine having a first extruder, a strainer placed at a forward position, and a first forming nozzle placed at a further forward position,

said first extruder having a barrel, a screw placed therein and a feed port,

said second continuous rubber-extruding machine having a second extruder, a gear pump placed at a forward position and a second forming nozzle placed at a further forward position,

said second extruder having a barrel, a screw placed therein and a feed port,

wherein a rubber material formed into a sheet form by a previous step of blending the rubber material is now fed through the feed port of said first extruder and is fed forwardly while being kneaded by rotation of said screw, and passes said strainer whereby foreign substances or particles are removed, and is outputted from said first forming nozzle in a form of a first rubber ribbon having a cross-section corresponding to the shape of said first forming nozzle,

said first rubber ribbon is fed through said feed port of said second continuous rubber-extruding machine, and is fed forwardly while being kneaded by rotation of said screw, and passes said gear pump, and is outputted continuously by said gear pump driven as rotated through said second forming nozzle in a form of a second rubber ribbon with a cross-sectional shape corresponding to the shape of said second forming nozzle,

said second rubber ribbon being used for building a tire,

said control system further having:

a pressure sensor for sensing a pressure in the gear pump;

pressure comparator for comparing a sensed pressure and a set value; and

motor controller for controlling the number of revolutions of a motor based on a comparison result given by the pressure comparator, the motor being operative to drive a screw of said second extruder.

2. The following is an examiner's statement of reasons for allowance: the prior art of record fails to teach or suggest a combination of a first extruder with a strainer for

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extruding a ribbon and a second extruder, following the first extruder, with a gear pump for extruding a ribbon in combination with a control system having a pressure sensor for the gear pump, a pressure comparator comparing the measured pressure to a set value and a motor controller controlling the drive screw of the second extruder based on the result given by the pressure comparator.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on M-F 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joseph S. Del Sole

6/8/06